



PATENT SPECIFICATION

DRAWINGS ATTACHED

881847

Date of filing Complete Specification: Nov. 5, 1959.

Application Date: Nov. 12, 1958.

No. 36319/58.

Complete Specification Published: Nov. 8, 1961.

Index at acceptance:—Class 36, D1(C: D: X6).

International Classification:—H02g.

COMPLETE SPECIFICATION

Improvements in Conduits for Electric Leads and Cables

I, DAGMAR O'CONNOR, a British subject, of 19 Queen's Gate Terrace, London, S.W.7, do hereby declare the invention for which I pray that a patent may be granted to me, and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to conduits for electric leads and cables laid along exposed surfaces such as, for example, walls inside buildings, and the invention has for its object to provide a protective covering for leads and cables which may be readily applied to the surfaces so as to afford a neat covering.

According to the present invention, a conduit comprises a back strip carrying retaining means for the lead or cable and a covering strip of resilient material adapted to be mated with the back strip to form an enclosure for the lead or cable, the back strip being adapted to be secured in position by fasteners passed therethrough into a wall or the like.

Further in accordance with the present invention, a conduit comprises a back strip adapted to be laid against a wall or the like and secured in position by screws or nails passed therethrough and carrying a plurality of spaced clips adapted to embrace a flexible cord or cable or a multiplicity of cords or cables so that the cord or cable or multiplicity thereof is or are secured to the back strip, a cover strip adapted to be secured to the back strip so as to enclose the cord or cable, the back strip and cover strip having inter-engageable marginal parts by which they are secured together to form the enclosure for the lead or cable, the cover strip being composed of a resilient material.

Desirably the conduit comprises a back strip of shallow channel cross section with its side limbs in the form of two substantially symmetrical inwardly inclined flanges and a bowed cross-section cover strip dimensioned and shaped to slide by its longitudinal marginal parts into the back strip or to snap in against the opposed faces of the two flanges,

[Price ...]

the back strip being provided with screw holes for securing it to a wall or skirting or the like.

Where the back strip is adapted to nest along the junction of two surfaces, e.g. at the junction of a wall and floor or ceiling, it may be of "L" cross-section with the said flanges turned in at the free ends of the limbs of the "L" section strip, the cover strip spanning the free ends of such limbs.

In order that the invention may be clearly understood and readily carried into effect, drawings are appended hereto showing embodiments of the invention and wherein

Figure 1 shows a portion of a length of conduit with the cover strip broken away to expose the leads supported by the back strip;

Figure 2 is a section on the line II—II of Figure 1;

Figure 3 is a broken front view of the back strip showing a single lead supported therein and with the cover strip removed;

Figures 4, 5, 6 and 7, are cross-sectional views showing modifications of the invention.

Referring to Figures 1 and 2 of the drawings, the back strip is composed of a hard plastic material and comprises a flat back portion 1 with inwardly turned flanges 2 extended along the marginal parts thereof and desirably rigid in relation to the back portion 1. These marginal flanges 2 comprise abutments for a resilient cover strip 3 which may be composed of a suitable insulating material of a resilient nature, e.g. extruded p.v.c. The cover strip 3 is bowed, or of wide "V" cross-section, and it is secured in position by springing the marginal stepped parts 3a thereof against the flanges 2.

The back strip is secured to the wall by screws or other suitable fastening members 4 passed through holes in the back strip.

The back strip carries at intervals a number of flexible metal clips, each comprising a metal strip 5 passed at its ends through slots 6 formed in the back strip and with

its ends brought together and secured by engaging one end part 5a in a slotted enlarged end part 5b thereby providing a loop embracing the desired number of leads or cables, three such leads or cables being indicated by way of example by the reference numeral 7.

The slots 6 are arranged at intervals along the back strip and desirably comprise two lines of outer slots 6a located near the flanges 2 as shown in Figure 3 and two lines of more narrowly spaced slots 6b, thus enabling short or long flexible clips 5 to be employed depending upon the number of cables to be supported and, as shown in Figure 3, the clip 5 is intended for a single cable 7 and therefore is supported in the slot 6b.

In the modification shown in Figure 4, the back strip 1 has its marginal flanges 2 bowed inwards symmetrically, and where they merge into the back strip 1 are formed with marginal steps 8, in which are tripped the inwardly turned marginal parts 3b of the cover strip 3. With this arrangement no join is visible along the front of the conduiting.

In the arrangement shown in Figure 5, the conduit comprises a single strip of material such as extruded p.v.c. and has a back strip 1a which merges into a cover strip 3a by an arcuate section corner 3b the back part 1a at its edge remote from the arcuate part 3b having an upwardly projecting longitudinal rib 9, which at its free end is slightly thicker than its portion, which joins the back part 1a. The rib 9 functions as an anchorage for the free edge of the cover portion 3a, which free edge is moulded with a substantially "C" section channelled part 10 adapted to snap over and grip into the rib 9. In such an arrangement it is desirable to reinforce or stiffen the conduit by a rigid back plate 11, which may be integral with the conduit.

In the arrangement shown in Figure 6, the back portion of the conduit is a symmetrical "L" section strip 12 with inwardly turned marginal parts 12a serving the same purpose as the parts 2 of the device shown in Figure 2, i.e. to form abutments for a bowed cover strip 13. In this arrangement both limbs of the back strip are slotted to receive the metal clips 5, the ends of which are joined together in the same manner as described with reference to Figures 1 and 3. Desirably both limbs of the back strip are provided with holes to receive the fastening screws or pins 4.

In the arrangement shown in Figure 7, the conduit is shaped to function as a picture rail, and for this purpose the back strip 1 has a stepped upper marginal flange 14 under which is engaged a longitudinal marginal part 15 of the cover strip 16 which has a

cross-section following substantially that normally adopted with a picture rail, its lower marginal part being formed with a stepped portion 17 adapted to abut against an upwardly turned flange 18 integral with the back strip 1.

It will of course be appreciated that the formation of the cover strip 3a of Figure 5 as an integral foldable extension of the back strip may be adopted with the embodiments shown in Figures 6 and 7.

WHAT I CLAIM IS:—

1. Conduit for electrical leads and cables to be laid along exposed surfaces comprising a back strip carrying retaining means for the lead or cable and a covering strip of resilient material adapted to be mated with the back strip to form an enclosure for the lead or cable, the back strip being adapted to be secured in position by fasteners passed therethrough into a wall or the like.

2. Conduit for electrical leads and cables to be laid along exposed surfaces comprising a back strip adapted to be laid against a wall or the like and secured in position by screws or nails passed therethrough and carrying a plurality of spaced clips adapted to embrace a flexible cord or cable or a multiple of flexible cords or cables so that the flex or cable or multiplicity thereof is or are secured to the back strip, a cover strip adapted to be secured to the back strip so as to enclose the flexible cords or cables, the back strip and cover strip having interengageable marginal parts by which they are secured together to form the enclosure for the lead or cable, the cover strip being composed of a resilient material.

3. Conduit according to Claim 1 or 2 wherein the cover strip is a hinged integral extension of one edge of the back strip and has a free edge adapted to be secured to the other edge of the back strip.

4. Conduit according to Claim 1 or 2 wherein the cover strip is at its marginal parts shaped to mate over inwardly inclined marginal parts of the back strip.

5. Conduit according to any of the preceding Claims wherein the cover strip from its top merges downwardly into engagement with the lower marginal part of the back strip so that the conduit also functions as a picture rail.

6. Conduit according to any of the preceding Claims 1 to 4 inclusive wherein the back strip is of L cross-section.

7. Conduit according to any of the preceding Claims wherein the back strip is provided with a plurality of longitudinally spaced apertures to receive deformable clips for the leads or cables.

8. Conduit according to Claim 7 wherein the said apertures are arranged as two parallel inner lines of apertures for clips and two parallel outer lines of apertures for longer clips.
9. Conduit for electrical leads and cables to be arranged along exposed surfaces substantially as hereinbefore described with reference to any one of the embodiments illustrated by the accompanying drawings.

GEE & CO.,
Chartered Patent Agents,
51/52, Chancery Lane, London, W.C.2,
and
22, Whitefriargate, Hull.
Agents for the Applicants.

PROVISIONAL SPECIFICATION

Improvements in Conduits for Electric Leads and Cables

- I, DAGMAR O'CONNOR, a British subject, of 19, Queen's Gate Terrace, London, S.W.7, do hereby declare this invention to be described in the following statement:—
- This invention relates to improvements in conduiting for cables electric leads and the like and has for its object to provide a readily applied form of protective covering for exposed cables, wires and the like in buildings and domestic residences and the like.
- According to the present invention the conduiting comprises a back strip of shallow channel cross section with its side limbs in the form of two substantially symmetrical inwardly inclined flanges and a bowed cross section cover strip dimensioned and shaped to slide by its longitudinal marginal parts into the back strip or to snap in against the opposed faces of the two flanges, the back strip being provided with screw holes for securing it to a wall or skirting or the like.
- Alternatively the back strip may be of "L" cross-section with the said flanges turned in at the free ends of the limb of the "L" section strip.
- The back strip is of hard plastic material into which are secured electric leads held in

place by a standard soft metal clip. To conceal these electric leads a bowed cross-section cover strip cut into suitable lengths would be inserted and would slide into place under the inwardly inclined flanges. Alternatively the cover strip is made of a more pliable plastic material could be snapped in against the opposed faces of the inwardly inclined flanges and more easily removed where necessary without damage to the flanges.

In one arrangement screw holes are provided for securing the back strip to walls, skirtings and the like and also slots for securing the cables and electric leads by means of soft metal clips which would be threaded into place before the back strip is screwed into position.

An "L" shaped back strip is provided for fitting around door and window frames and the like.

If desired a small plastic mortise made to fit the width of the back strip could be supplied to ensure exact fittings in the cutting of corners and joins.

DAGMAR O'CONNOR.

